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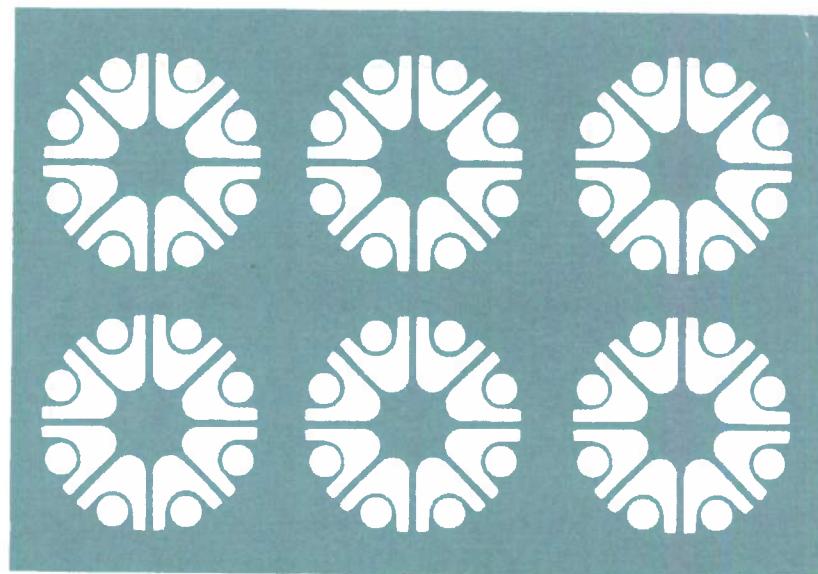
Human Affairs Research Centers  
4000 N.E. 41st Street / Seattle, Washington 98105

## Research Report

Final Report  
October 1972

Perceptions of Navy Basic Training:  
Recruits Before and During Training

Stanley M. Nealey



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BATTELLE MEMORIAL INSTITUTE  
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SEATTLE, WASHINGTON

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Report of Work Accomplished under  
Contract N00014-67-A-0299-0016  
at Colorado State University

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Stanley M. Nealey  
Principal Investigator

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13. ABSTRACT  Attitudes of enlisted men toward interpersonal influence (the rank and authority structure) in the Navy were explored by administering questionnaires to 165 recruits at the time they joined the Navy and to 365 basic trainees during the final week of Navy basic training. Recruits had fairly accurate expectations of basic training, but underestimated the amount of inconsiderate and punitive leadership they would face during basic. Both groups agreed that the organizational climate of basic training is "tougher" and more punitive than they expect in the Navy itself and much more negative than in most civilian jobs. The climate typical of civilian jobs was seen to be about right to promote good performance and morale. Basic trainees, after actual experience with the military, favored "softer" organizational climates than did recruits.		
All five modes of leader power identified by French and Raven (1959) were seen to be effective in eliciting high effort to perform one's duty, but coercive and legitimate power were seen as detrimental to morale.		
The research design will be completed under a new contract so conclusions must be tentative, but preliminary results suggest that an all-volunteer military may need to adopt leadership approaches more like those currently typical of civilian work environments.		

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## PERCEPTIONS OF NAVY BASIC TRAINING: RECRUITS BEFORE AND DURING TRAINING

### Background

This report is a partial account of results obtained during the first eleven months (ending August 31, 1972) of a project to study interpersonal influence in the military. The contract was moved from Colorado State University to Battelle, Human Affairs Research Centers in Seattle at the end of this period. This report is therefore an interim status report since work is presently continuing under the contract. Results are only partially reported since the research design involves comparisons of results from the present data sets with data sets not yet complete.

### Introduction

The aim of this project is the investigation of the bases, the operation, and the consequences of interpersonal power (the rank and authority system) in military organizations. This topic is particularly timely in view of the change to all-volunteer services. When this change takes full effect, any existing need to modify the exercise of interpersonal power in military organizations will probably be intensified. Such changes should not be based on anecdotal information and "common sense," without checking its validity. For example, Campbell and McCormack (1957) found, contrary to then-current opinion, that officers tended to become less authoritarian the longer they served in the military. A great many untested assumptions surround authority in the military, e.g., the assumption that enlisted men must learn to obey orders "automatically" during basic training in order to function properly in

combat, or the idea that basic training must be a rugged experience in order for enlisted men to respect the service.

Activity during the period covered by this report involved three surveys of enlisted men and one of officers. The data from two of the surveys of enlisted men are complete enough to report here. Several additional surveys are planned in coming months.

#### Method

Two surveys of enlisted men have been completed. The first involved 165 Navy recruits at the Armed Forces Examining and Entrance Station (AFEES) in Los Angeles. These recruits had just joined the Navy and were being processed prior to departure for Navy basic training in San Diego. The second survey involved 365 Navy recruits at the Naval Training Center (NTC) in San Diego. These recruits had completed seven or eight weeks of a nine-week basic training program. The survey questionnaires were administered by military testing personnel. Respondents completed them anonymously and they were sent in sealed envelopes directly to the investigator.

The objective of the questionnaires was to measure attitudes toward five organizational climate dimensions and five modes of expression of interpersonal influence or leadership power. Navy basic training was the focus situation. The questionnaires used with both groups were parallel in form and content.

The five organizational climate dimensions were: (1) hierarchical vs. equalitarian decision making, (2) formal vs. informal superior-subordinate relations, (3) supportive vs. punitive handling of mistakes by subordinates, (4) close vs. general supervision, and (5) superiors considerate vs. superiors not friendly.

The five leadership power dimensions were those identified by French and Raven (1959): (1) legitimate power based on rank and position; (2) expert power based on knowledge; (3) reward power based on positive rewards; (4) referent power based on personal respect; and (5) coercive power based on negative sanctions and punishment.

The five organizational climate dimensions were described by means of five pairs of contrasting situations. On each dimension the respondents used a five point scale to describe (1) Navy basic training, (2) expectations of Navy duty 18 months after basic training, (3) civilian jobs, (4) the situation in which they would try hardest to do a good job, and (5) the situation in which they would be most satisfied. The objective of this section of the questionnaire was to compare basic training, regular Navy life and civilian life on the dimensions of organizational climate and also to obtain a description of the type of situation in which recruits felt they would be productive and satisfied. Keep in mind that one group of respondents had nearly completed basic training while the other had not even started. The research design calls for comparing the perceptions of these "before" and "during" groups with those of an "after" group of enlisted men 18 months after basic training. Data are not yet available from this final group.

Attitudes toward the five French and Raven modes of expression of interpersonal power were obtained by describing situations illustrating each mode of power expression. Respondents then indicated (1) how frequently that form of power is used during basic, (2) how frequently they think it should be used, (3) how frequently that form of power is used in most civilian jobs, (4) how hard they would try to do a good job under each mode of power and (5) how satisfied they would feel.

In a final section of the questionnaire, 14 questions probed general attitudes toward the military, basic training, the supervision process, and taking orders.

### Results

Table 1 presents comparisons of the two samples in terms of mean age, high school class ranking, and size of home town. These data suggest that both groups are roughly comparable on these three demographic variables. Differences in questionnaire responses between the two groups probably do not simply reflect different background factors, and thus can be cautiously interpreted as reflecting different amounts of experience in the military.

The responses of the group of recruits tested at the Los Angeles AFEES to the organizational climate questions are displayed in Table 2. Comparable data from recruits near the end of basic training in San Diego are displayed in Table 3. Mean values from these two groups are graphed for easy comparison in Figures 1 to 5.

As a rule of thumb for interpreting differences between the two samples, the following guides will hold in virtually all comparisons: A difference of 0.25 between means is statistically significant at the .05 level, even when both samples exhibit large standard deviations, i.e., greater than 1.0; when the standard deviations are less than 1.0, a difference of .25 between means is statistically significant at the .01 or .001 level.

Examination of Figures 1-5 indicates that both groups perceive the climate of basic training in the Navy to be highly controlled and punitive. The climate in the Navy itself is seen in somewhat more "positive" terms and the mean values for civilian jobs are more positive yet. The climate in civilian jobs is perceived to be quite close to the levels at which respondents felt they would make their best effort. Highest satisfaction was perceived to occur in situations characterized by permissive performance evaluation, equalitarian decision making and informal and considerate leadership. Comparing the means of "best effort" and "satisfaction" shows that these respondents felt they would do their best work in a climate a little "tougher" than would be satisfying. In general the fairly close correspondence of the means on "civilian," "best effort," and "satisfaction" indicates that organizational climate standards tend to be established by civilian jobs and that the Navy and particularly basic training are seen as having much "tougher" climates than are conducive to good performance and morale.

In looking ahead to basic training, the AFEES recruits overestimated the closeness of supervision (Figure 4) and underestimated the degree of inconsiderate and punitive leadership they would face (Figures 5 and 3) during basic training. This difference in perception of closeness of supervision (Figure 4) also occurred in the expectations the two groups had of the Navy itself. The group in basic training held a generally more positive view of the climate of civilian jobs and also had "best effort" and "satisfaction" scores closer to the positive or "soft" end of the climate dimensions. Two factors may account for this: (1) the group currently experiencing basic training may be led into fond reminiscences of civilian work--a sort of "climate backlash," and (2) the AFEES group has just joined the military but has no experience of it yet; during this "honeymoon" phase immediately after joining, they may be overestimating the tolerance they will have for its tougher climate.

Means and standard deviations on reaction to the forms of leadership power are presented for the AFEES recruits and recruits in basic training at NTC in Tables 4 and 5 respectively. Comparison graphs for the means of both groups across the five forms of leadership power are presented in Figures 6-10. Both groups feel that coercive power is the most frequently expressed power mode in basic training, with expert power being expressed next most frequently. The AFEES group expected legitimate and expert power to be used during basic more frequently than reported by the group actually in basic training (Figures 6 and 7) while the reverse was true for reward power (Figure 8). Comparing the pattern of power used in

basic training with the pattern respondents felt should be used is interesting. The group in basic felt that about the right amounts of legitimate, expert, and reward power were being used (Figures 6, 7, and 8), but they felt that a bit more referent power should be used (Figure 9) and that far less coercive power (Figure 10) should be used in basic training.

Examination of the levels of effort that would be tapped by use of the various leadership power modes is quite interesting. Both groups reported that they would be highly influenced by all five forms of power. However, they would not be very satisfied if legitimate and coercive power were used (see Figures 6 and 10). Taken at face value, these data indicate that high effort to perform can be elicited by any of the five modes of power identified by French and Raven but that use of legitimate power, "You do what I say because I have more stripes on my sleeve," and coercive power, "You do what I say or face punishment" will engender low levels of satisfaction.

The responses of both groups to 14 items relevant to the authority process in the Navy are displayed in Figure 11. Both groups saw basic training as important and intended to make their best effort to do well. The most striking differences in mean attitudes between the two groups occurred on Items 6 and 14. The group in basic training felt strongly that people must like each other to work well together (Item 6). This might be interpreted as evidence that the strong emphasis, during basic training, on

high morale made believers of them. The response of the basic trainees to Item 14 indicates that they see all orders, whether in combat or not, as important. Again, this message is emphasized during basic training.

### Conclusions

Some tentative conclusions can be drawn from the results presented above. First, it appears that most facets of the basic training environment can be accurately estimated prior to enlistment but that some aspects are quite incorrectly perceived.

Recruits before training, as well as those in training, appear to feel that the organizational climate and leadership approaches during basic are "tough" but with some exceptions fairly appropriate. The exceptions are the use of too much coercive and legitimate power and the over reliance on a formal, hierarchical, and punitive organizational climate. Both groups felt boot camp was tougher than the Navy, which was tougher than civilian work environments. These generalizations should be considered in light of the strong finding that civilian work environments were seen as "about right" in generating good job performance and satisfaction. The AFEES recruits were more inclined to see boot camp as only an initiation rite than were the men going through it, but both groups looked forward to better organizational climate and leadership practices once they joined the fleet. Whether these expectations are born out will be discovered in the course of a follow-up study now in progress.

## Final Note

These data will be more fully analyzed and displayed in later reports. Comparison data will also be available from an additional sample of Navy recruits at the AFEES in Denver, Colorado, and from several hundred enlisted men with two years of Navy service.

TABLE 1

DEMOGRAPHIC VARIABLES FOR 165 LOS ANGELES AFES RECruits  
AND 365 SAN DIEGO NTC RECruits

	Los Angeles AFES		San Diego NTC	
	<u><math>\bar{X}</math></u>	<u>S.D.</u>	<u><math>\bar{X}</math></u>	<u>S.D.</u>
Age				
Population of Home City or Town*	232 mo.	19.8	230 mo.	16.3
High School Class Standing**	3.56	1.46	3.32	1.57
	2.76	.73	2.86	.74

\*1 = Less than 5,000; 2 = 5,000-10,000; 3 = 10,000-30,000; 4 = 30,000-100,000;  
5 = 100,000-1,000,000; 6 = over 1,000,000

\*\*1 = Bottom 25%; 2 = Below average, but not in bottom 25%; 3 = Above average, but not in top 25%; 4 = Top 25%.

TABLE 2

AVERAGE ORGANIZATIONAL CLIMATE SCORES OF NAVY INDUCTEES (L.A., AFES)  
(N = 165)

Questions	Comparisons <sup>a</sup>									
	1	2	3	4	5	1	2	3		
1. Expect in basic training	$\bar{X}^*$ 1.96	S.D. 1.22	$\bar{X}$ 1.47	S.D. 1.00	$\bar{X}$ 2.79	S.D. 1.64	$\bar{X}$ 1.88	S.D. 1.29	$\bar{X}$ 2.79	S.D. 1.60
2. Expect 18 mo. after basic	2.79	1.12	2.21	1.16	3.07	1.22	2.62	1.17	3.33	1.23
3. Expect in civilian job	2.79	1.34	3.01	1.22	3.30	1.17	3.10	1.19	3.27	1.12
4. Situation you try hardest	3.19	1.47	2.93	1.35	3.49	1.38	2.83	1.31	3.68	1.26
5. Situation most satisfied	3.52	1.39	3.30	1.64	3.74	1.33	3.16	1.32	3.83	1.28

- a1. Hierarchical decision making = 1, democratic decision making = 5
2. Formal authority structure = 1, informal authority structure = 5
3. Punitive performance evaluation = 1, permissive performance evaluation = 5
4. Close supervision = 1, general supervision = 5
5. Inconsiderate leadership = 1, considerate leadership = 5

\*A difference of 0.25 or more between means is significant beyond the .05 level

TABLE 3

## AVERAGE ORGANIZATIONAL CLIMATE SCORES OF NAVY RECRUITS (SAN DIEGO, NTC)

(N = 365)

Questions  
Comparisons<sup>a</sup>

	1	2	3	4	5			
	<u><math>\bar{X}^*</math></u>	<u>S.D.</u>	<u><math>\bar{X}</math></u>	<u>S.D.</u>	<u><math>\bar{X}</math></u>	<u>S.D.</u>	<u><math>\bar{X}</math></u>	<u>S.D.</u>
1. Experience in basic training	2.00	1.20	1.35	.84	2.14	1.53	2.37	1.42
2. Expect 18 mo. after basic	2.90	1.27	2.45	1.23	2.93	1.29	3.07	1.27
3. Expect in civilian jobs	3.12	1.37	3.56	1.23	3.56	1.19	3.17	1.23
4. Situation you try hardest	3.68	1.46	3.48	1.41	3.36	1.49	3.10	1.44
5. Situation most satisfied	4.00	1.32	3.84	1.31	3.74	1.32	3.19	1.49

<sup>a</sup>1. Hierarchical decision making = 1, democratic decision making = 5  
 2. Formal authority structure = 1, informal authority structure = 5  
 3. Punitive performance evaluation = 1, permissive performance evaluation = 5  
 4. Close supervision = 1, general supervision = 5  
 5. Inconsiderate leadership = 1, considerate leadership = 5

\*A difference of 0.25 or more between means is significant beyond the .05 level

TABLE 4

THE USE OF INTERPERSONAL POWER AS PERCEIVED BY NAVY INDUCTEES (L.A. AFES)  
(N = 165)

Questions	Forms of Leadership Power										
	Legitimate		Expert		Reward		Referent		Coercive		
	$\bar{X}^*$	S.D.		$\bar{X}$	S.D.		$\bar{X}$	S.D.		$\bar{X}$	S.D.
1. Expected frequency during basic (1 = often, 5 = seldom)	1.81	1.00	2.06	1.74	3.22	1.44	3.11	1.34	2.15	1.36	
2. How frequently should it occur (1 = often, 5 = seldom)	2.73	1.20	2.59	1.15	3.13	1.67	2.79	1.13	3.36	1.27	
3. Frequency in civilian jobs (1 = often, 5 = seldom)	3.16	1.30	2.67	1.23	2.86	1.19	2.99	1.16	3.56	1.19	
4. How hard will you try (1 = no effort, 5 = much effort)	3.91	1.48	4.16	1.06	3.91	1.11	3.96	1.12	3.43	1.31	
5. How satisfied (1 = dissatisfied, 5 = satisfied)	2.86	1.21	3.69	1.06	3.46	1.28	3.61	1.15	2.01	1.08	

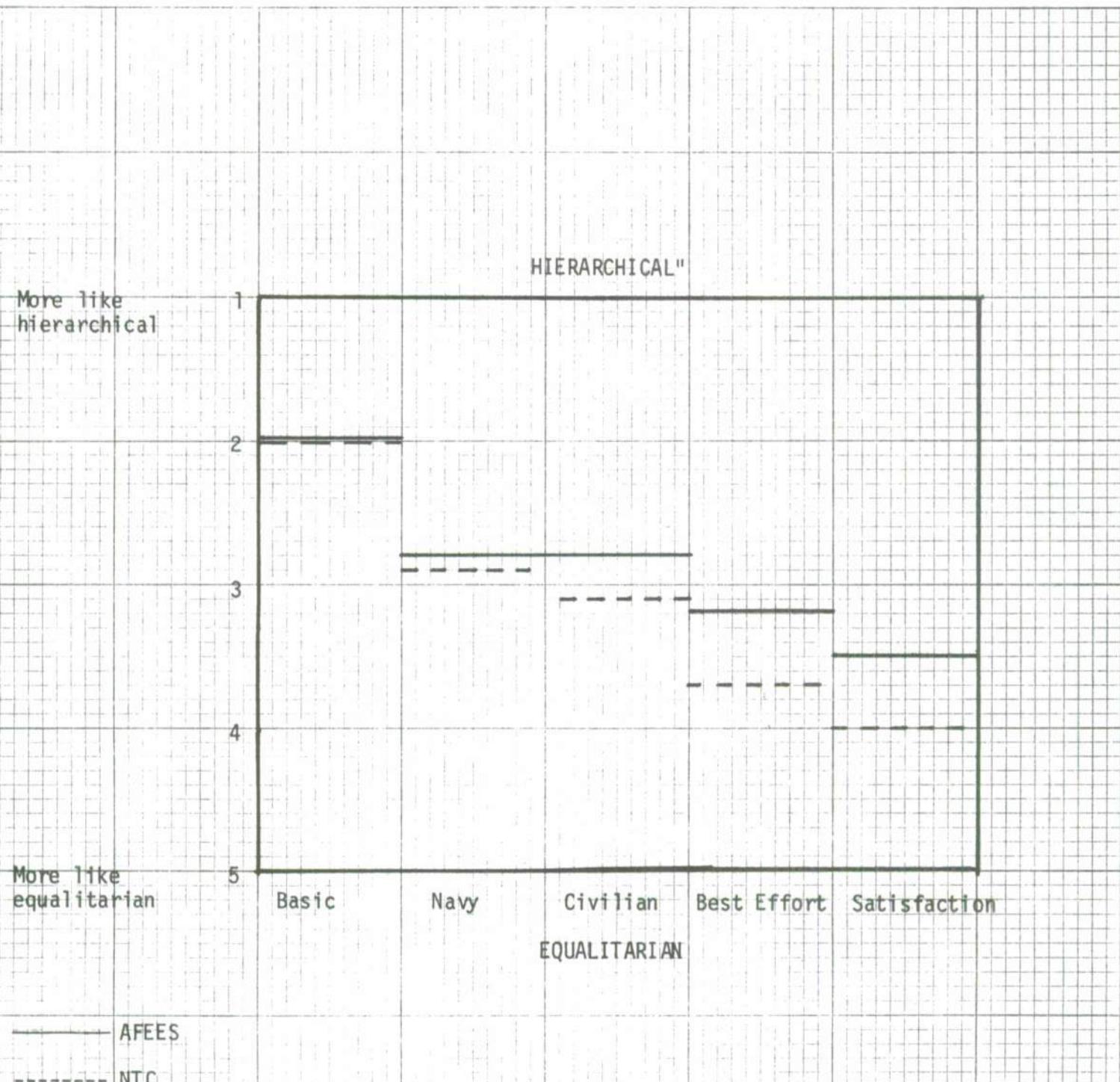
\*A difference of 0.25 or more between means is significant beyond the .05 level

TABLE 5

THE USE OF INTERPERSONAL POWER AS PERCEIVED BY NAVY RECRUITS (SAN DIEGO, NTC)  
(N = 365)

Questions	Forms of Leadership Power										
	Legitimate		Expert		Reward		Referent		Coercive		
	<u><math>\bar{X}^*</math></u>	<u>S.D.</u>		<u><math>\bar{X}</math></u>	<u>S.D.</u>		<u><math>\bar{X}</math></u>	<u>S.D.</u>		<u><math>\bar{X}</math></u>	<u>S.D.</u>
1. Expected frequency during basic (1 = often, 5 = seldom)	3.07	1.50	2.68	1.40	2.60	1.44	3.22	1.53	2.18	1.45	
4. 2. How frequently should it occur? (1 = often, 5 = seldom)	3.26	1.23	2.64	1.30	2.80	1.33	2.70	1.35	3.53	1.35	
3. Frequency in civilian jobs (1 = often, 5 = seldom)	3.29	1.27	2.58	1.30	2.80	1.32	2.84	1.29	3.65	1.31	
4. How hard do you try (1 = no effort, 5 = much effort)	3.91	1.10	4.17	.98	4.08	1.08	3.67	1.30	3.84	1.32	
5. How satisfied (1 = dissatisfied, 5 = satisfied)	2.86	1.33	3.79	1.14	3.48	1.29	3.46	1.28	2.05	1.28	

\*A difference of 0.25 or more between means is significant beyond the .05 level



**Figure 1:** Comparison of judgements on the hierarchical-equalitarian dimension of organizational climate.

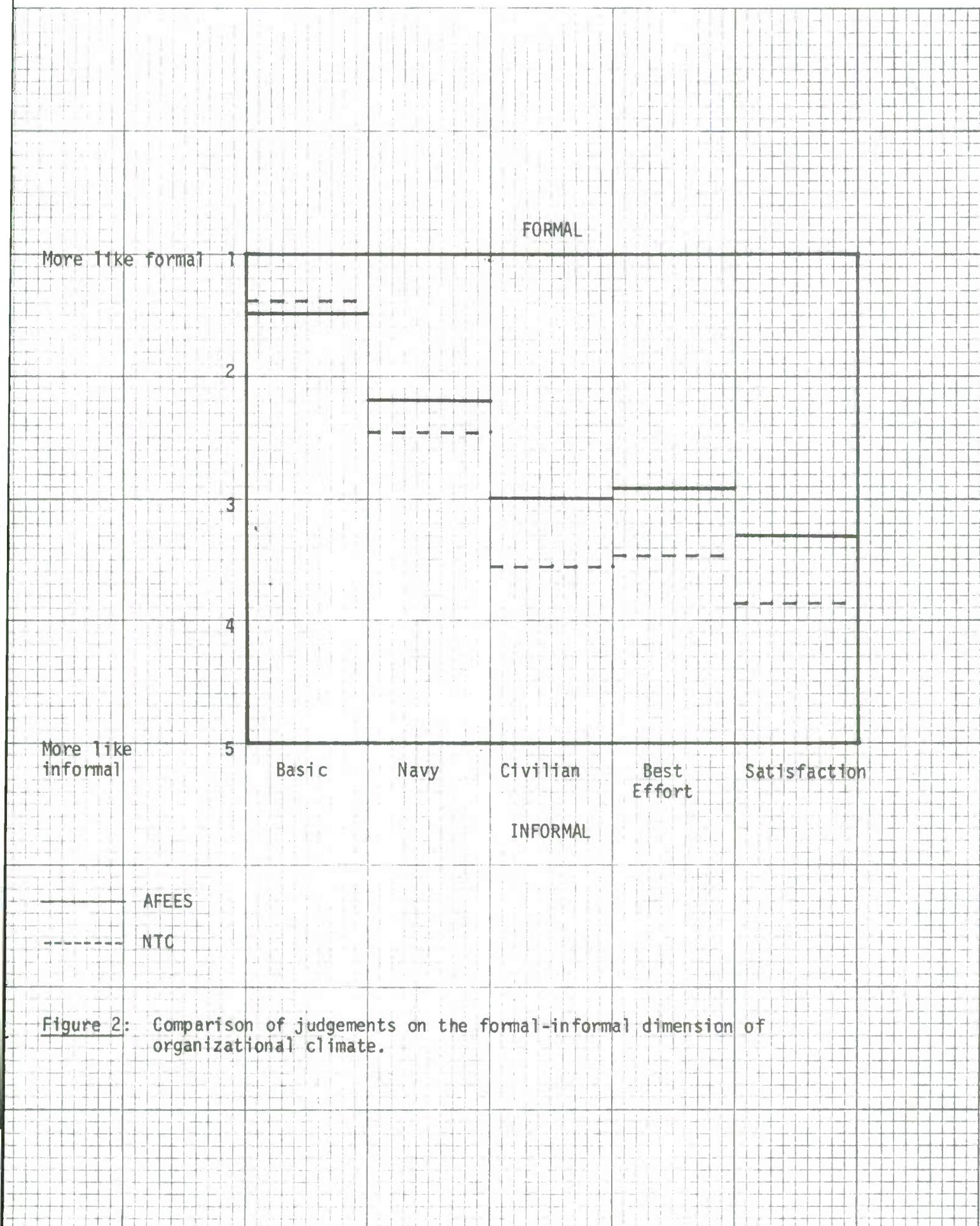


Figure 2: Comparison of judgements on the formal-informal dimension of organizational climate.

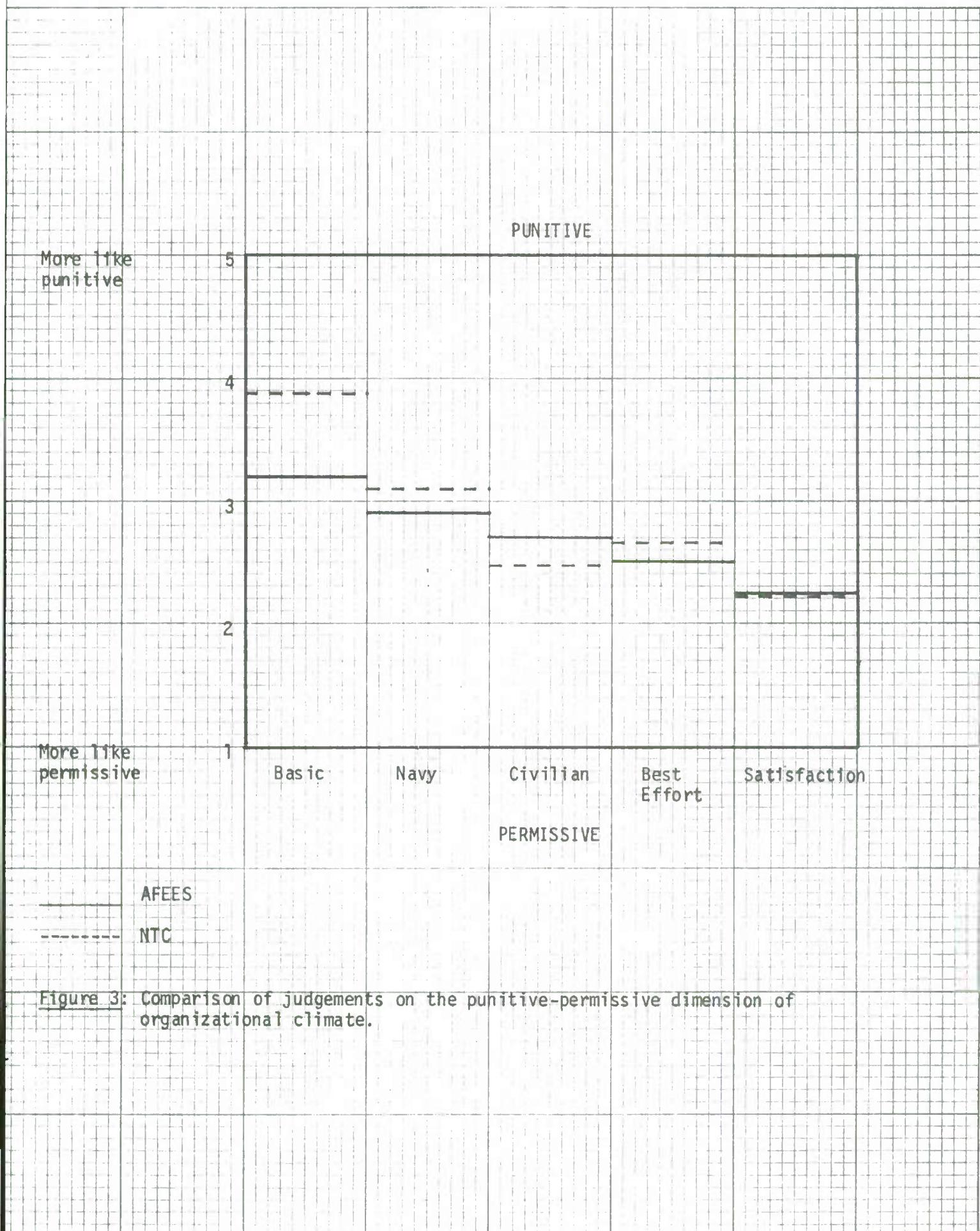


Figure 3: Comparison of judgements on the punitive-permissive dimension of organizational climate.

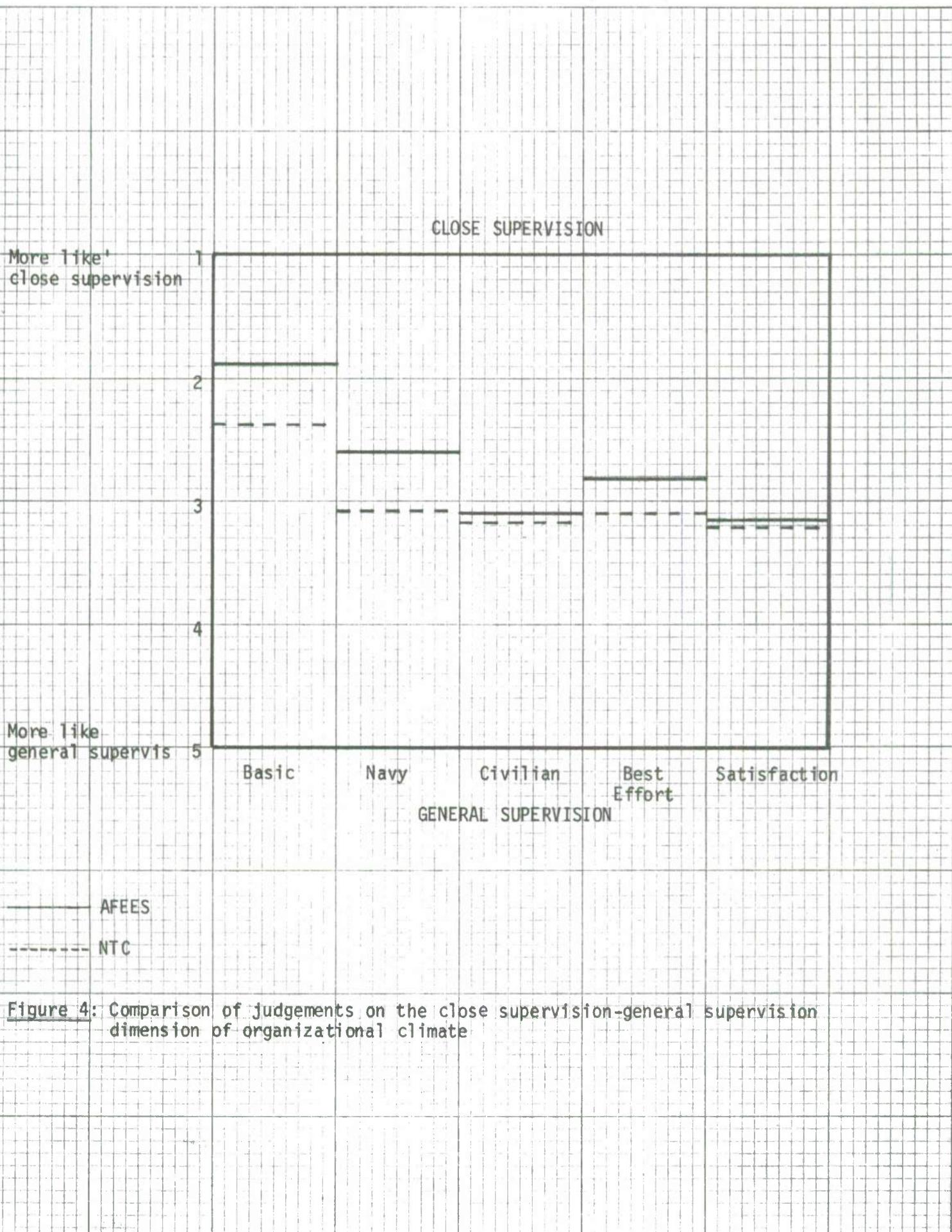
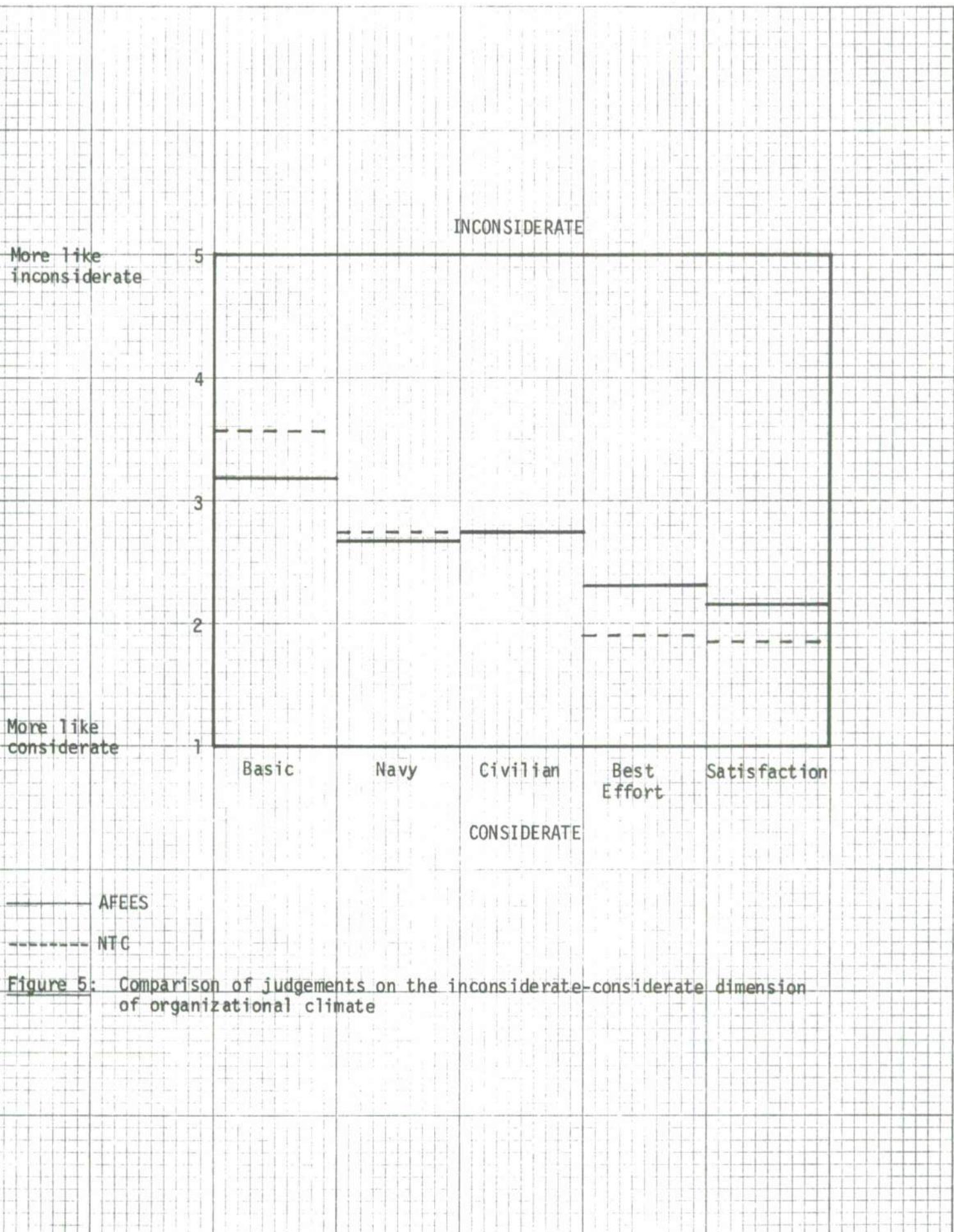


Figure 4: Comparison of judgements on the close supervision-general supervision dimension of organizational climate



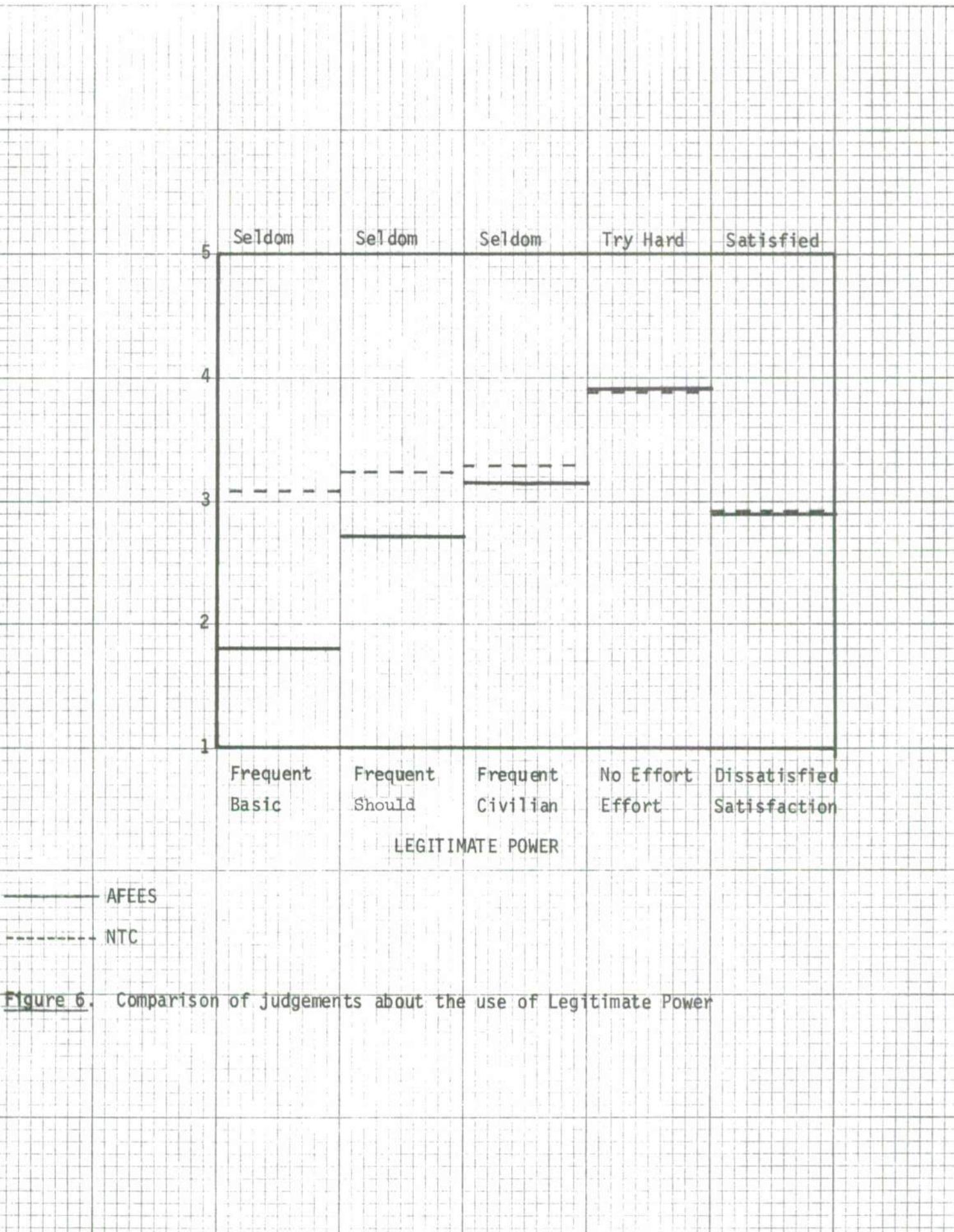


Figure 6. Comparison of judgements about the use of Legitimate Power

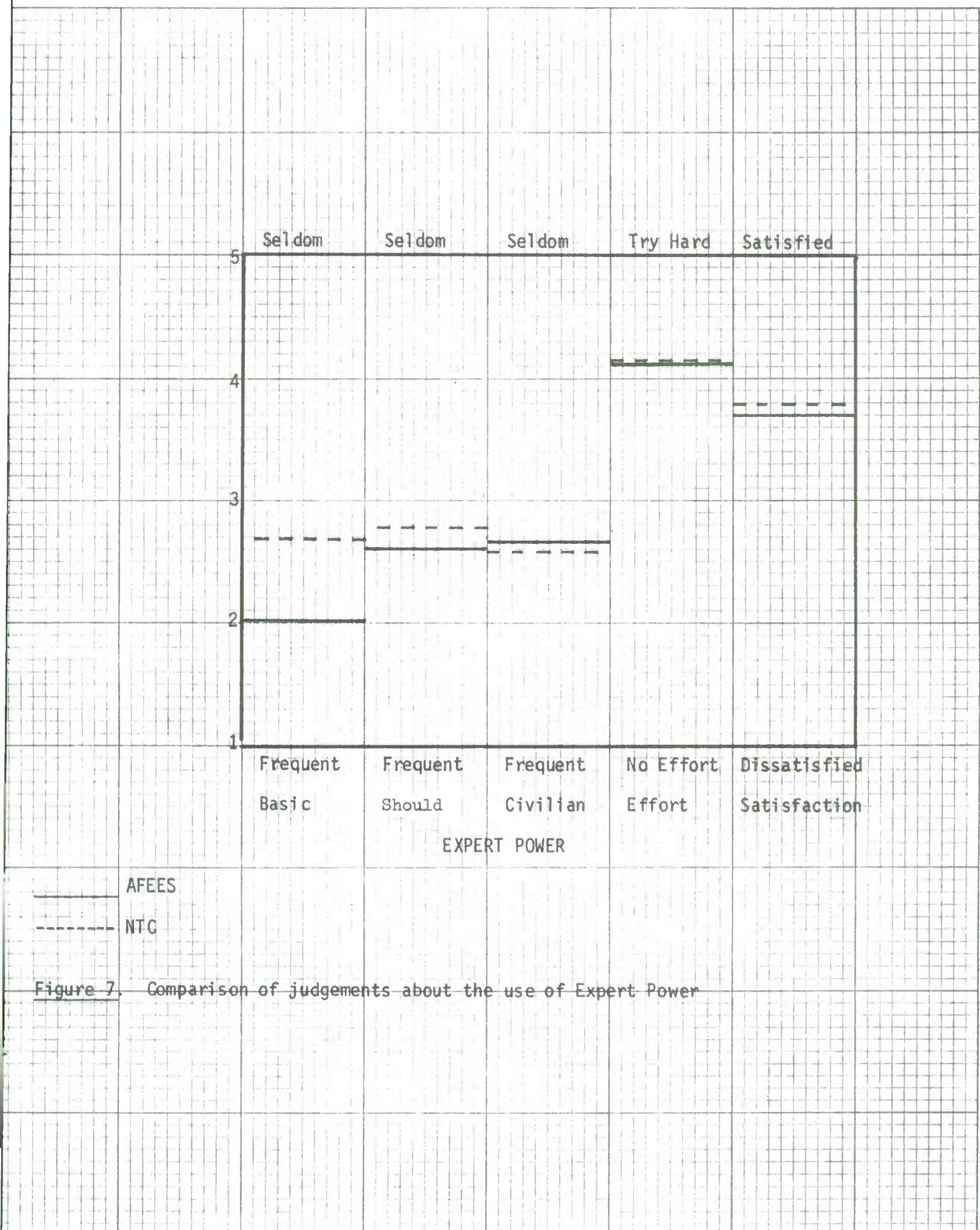


Figure 7. Comparison of judgements about the use of Expert Power

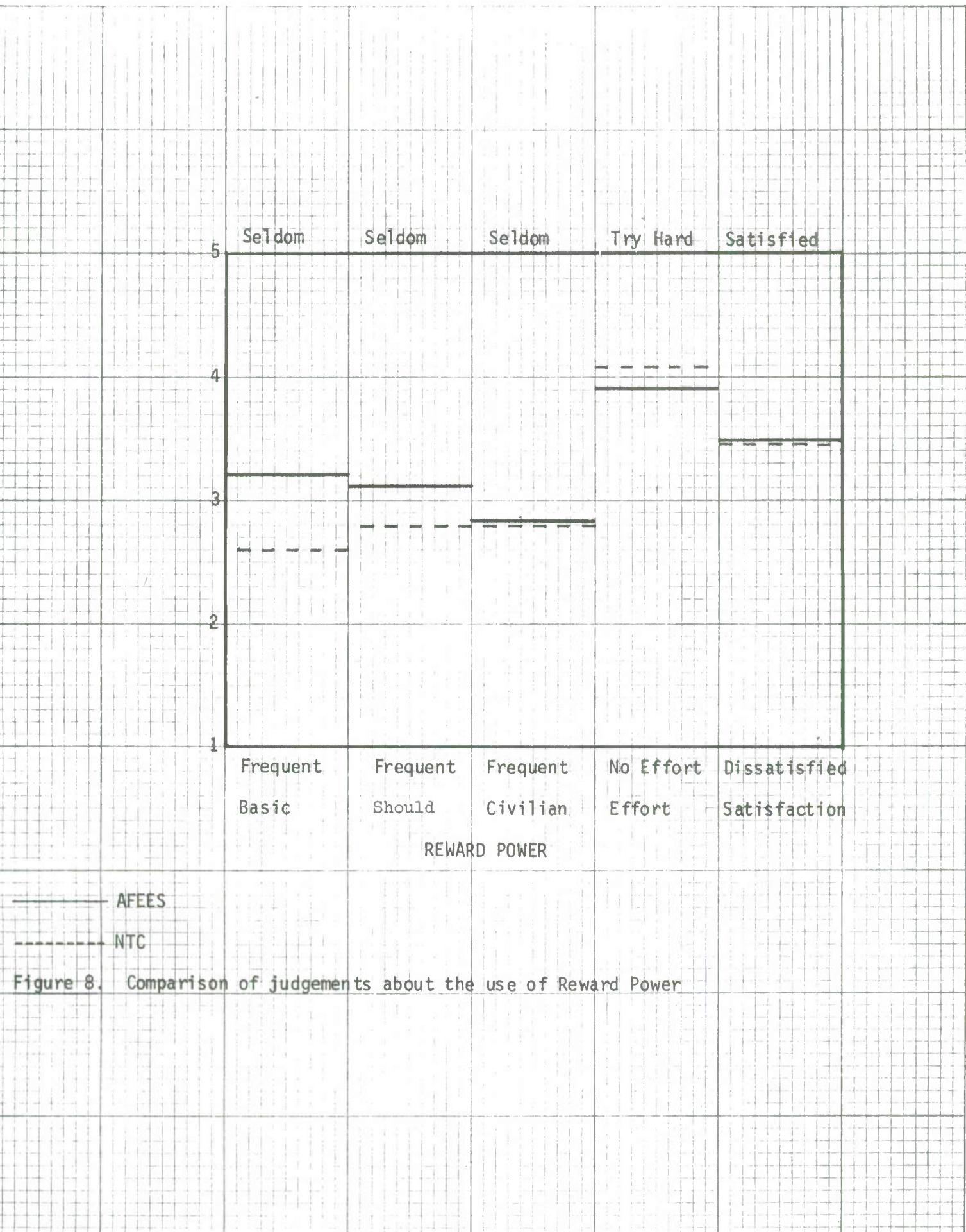


Figure 8. Comparison of judgements about the use of Reward Power

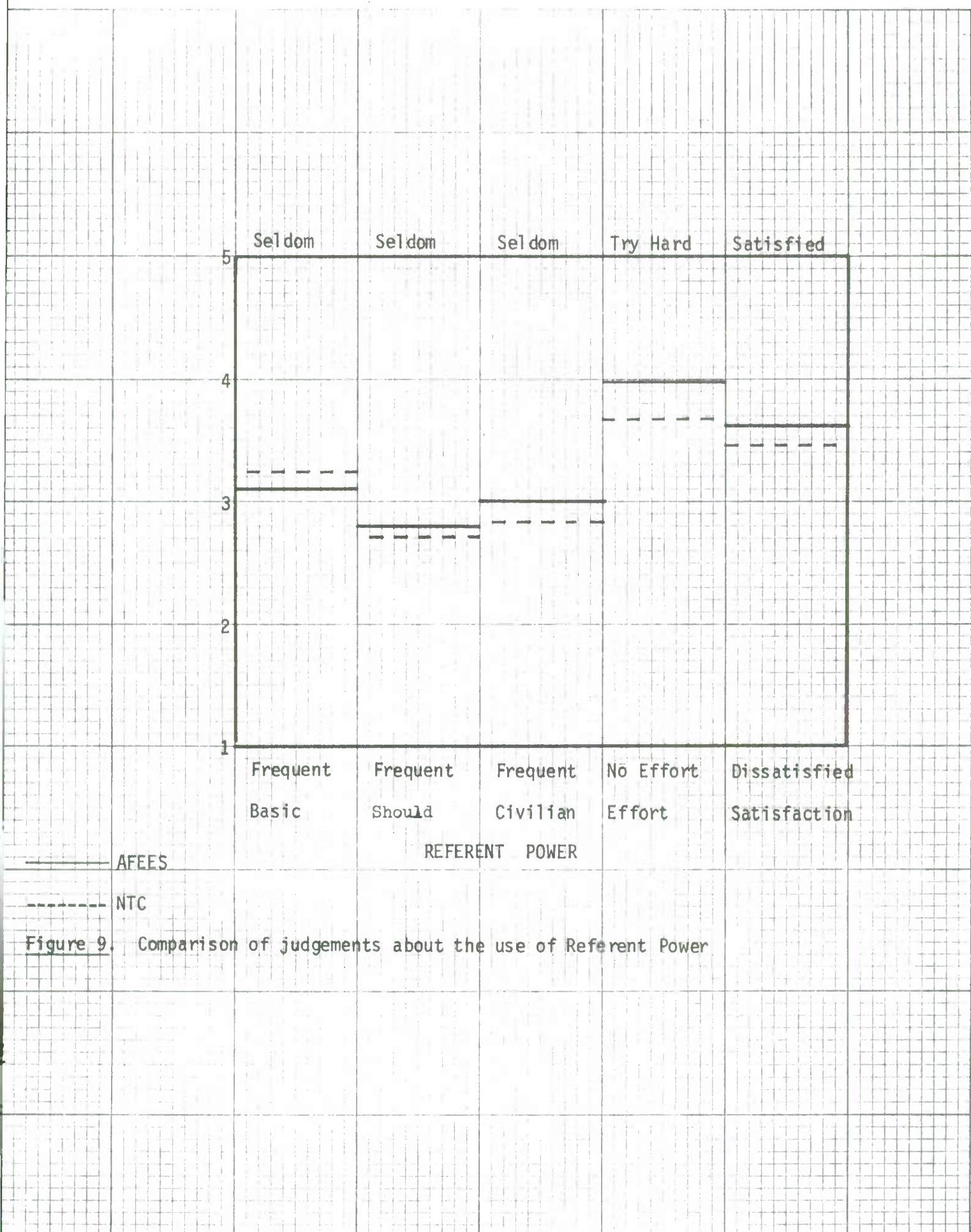


Figure 9. Comparison of judgements about the use of Referent Power

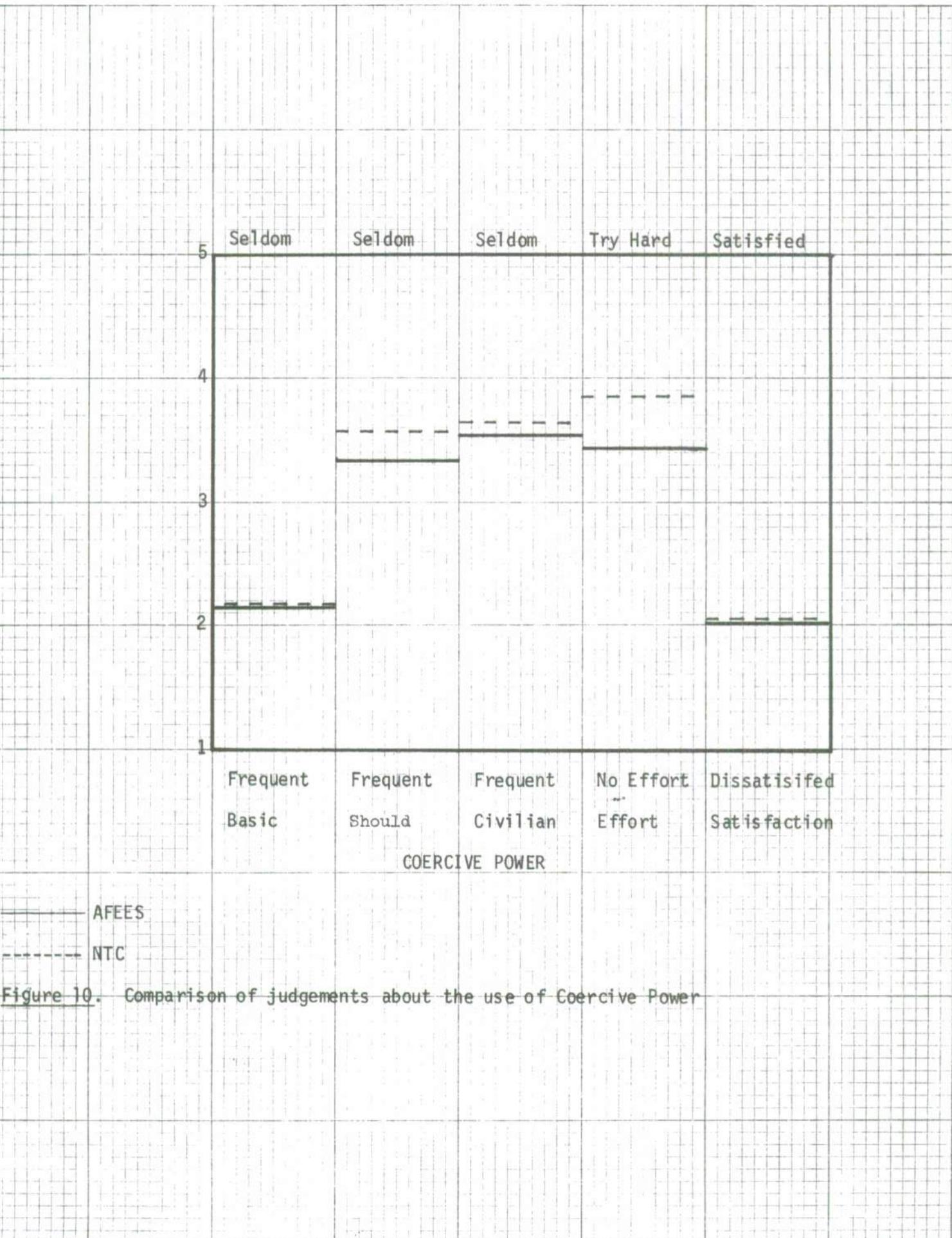
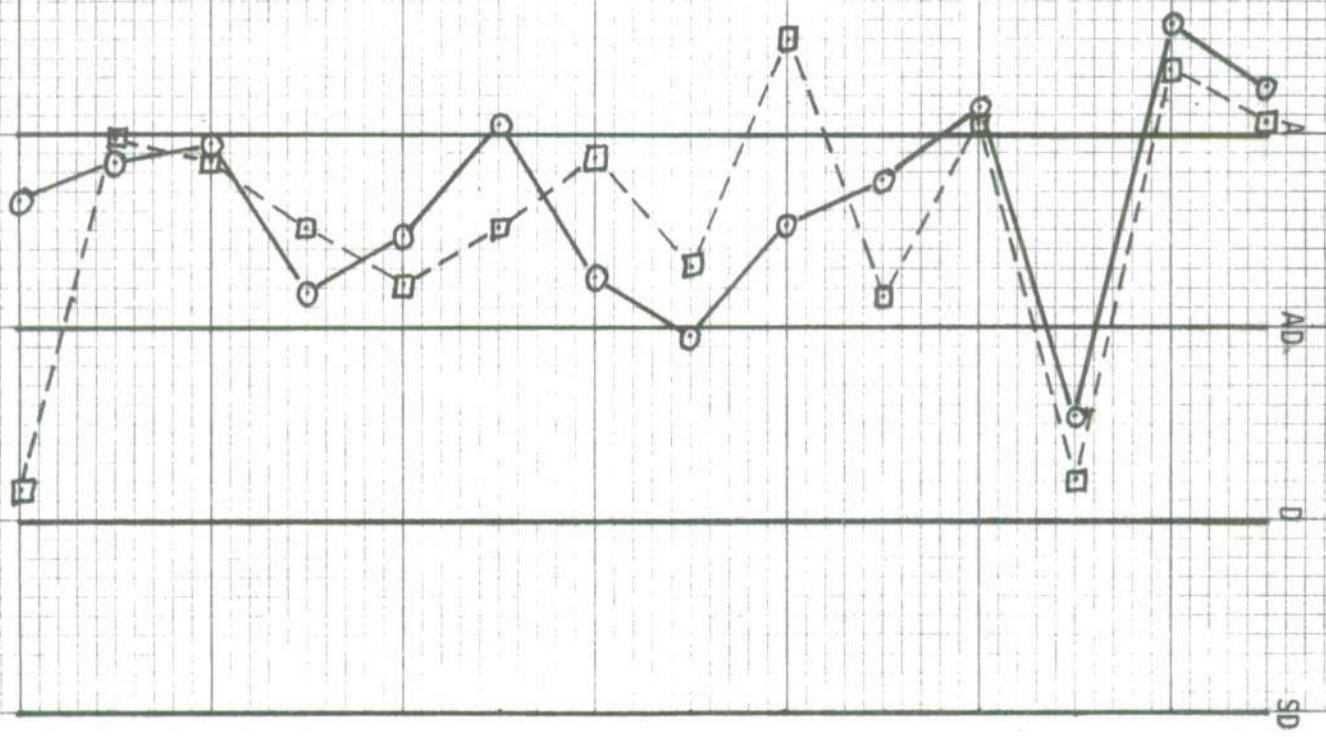


Figure 10. Comparison of judgements about the use of Coercive Power

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Figure 11. Comparison of responses of groups from AFEEES and basic training.

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